A Review Study on the Adoption of ICT in Hotel Industry in Delhi NCR

Varun Aggarwal
Research Scholar
Bharati Vidyapeeth University,
Pune, India

Dr. Ashutosh Gaur
Associate Professor
Bharati Vidyapeeth University,
Pune, India

Dr. Nitin Nayak
Professor & Director
Bharati Vidyapeeth University,
Institute of Management,
Kolhapur, India

Abstract— **The adoption of ICT has been slower among Indian hotel industry than in other countries. It has also shown that the rate of adoption of ICT by hotel industry varies from one industry to another e.g. manufacturing, production, retail, service sector etc. One important group of hotel industry in the service sector has been overlooked in previous research, namely general practices. This research aims to address the issues of e-commerce adoption by hotel industry. Before doing so, it is necessary to understand the principal concepts related to this research, namely, e-commerce, Information and Communication Technology (ICT), small and medium enterprises hotel industry. We specifically examine the hotel industry characteristics and contextual issues that may be relevant in explaining the adoption and usage of ICT among hotel industry in developing countries.**

Index Terms— ICT Adoption, KMO.

I. INTRODUCTION

The Diffusion of Innovation (DOI) theory forms the major theoretical foundation for discussing the determinants of ICT adoption among the business organizations (Rogers, 2003). However, due to the unique characteristics and contextual issues of the SMEs discussed later in this chapter, other theories explaining ICT adoption and usage are also discussed. Those theories explaining ICT adoption and usage among hotel industry include:

- The Resource Based Theory (RBT) (Caldeira and Ward, 2003; Penrose, 1959);
- The Institutional Intervention theory (King et al., 1994);
- The Networks Theory (Abrahamson and Rosenkopf, 1997);
- The Staged Adoption Theory (Damsgaard and Scheepers, 2000; Nolan, 1973).

The chapter also examines the specific methods used to evaluate of EWA and EWU. Finally, Chapter 2 examines the integrated ICT adoption theory which includes individual adoption theories discussed inexamines the integrated ICT adoption theory which includes individual adoption theories discussed in the chapter.

II. INFORMATION AND COMMUNICATION TECHNOLOGY

ICT is fast becoming one of the main drivers of change in organizations (Adebambo and Toyin, 2011). ICT has been defined in chapter one as any technology that facilitates communication and assists in capturing, processing and transmitting information electronically (Apulu and Latham, 2009). In other words, ICT is simply a wide range ofcomputerised technologies. Ritchie and Brindley (2005) describe ICT as "the array of primarily digital technologies designed to collect, organize, store, process and communicate information within and outside an organization". Also, Barba-Sánchez et al. (2007) view ICT as a collective term for a wide range of software, hardware, telecommunications and information management techniques, applications and devices, that could be used to create, produce, analyse, process, package, distribute, receive, retrieve, store and transform information. Davenport (1993) refers to ICT as an enabler of organizational change. In contrast, Apulu and Latham (2009c) describe ICT as a tool that brings about competitive advantage which in turn, helps to deliver business value in organizations.

Heeks (1998) states that ICT has almost the same meaning as IT but emphasises that ICT or IT is different from Information Systems (IS). Heeks (1998) further defines IT as "computing and telecommunications technologies that provide automatic means of handling information" while information systems are defined as "systems of human and technical components that accept, store, process, output and transmit information". Peppard (1993) argues that some literature use the terms IS and IT interchangeably even though they may not necessarily mean the same.

According to Laudon and Laudon (2006), information systems are "a set of interrelated components that collect (or retrieve), process, store, and distribute information to support decision making and control in an organisation whilst information technology refers to all the hardware and software that a firm requires, in order to achieve its business objectives". This implies that there is a close link between IT and IS since one depends on the other. IT will be of no value if it is not linked to IS thus, for IS to succeed it requires IT.Similarly, in business, ICT is often classified into two broad types of product; the traditional computer-based technologies and the sophisticated/advanced or more recent and fast-growing range of digital communication technologies that allow people and organizations to communicate and share information digitally (Dai, 2009; Xuesong, 2009).

More recent technologies have enabled organizations to share and disseminate information between various users simultaneously, customise functionality and achieve higher levels of interactivity (Maneche and Schoensleben, 2004). Recent technologies are also more sophisticated and help organizations to reduce their operational costs, enhance customer service levels and satisfaction, thereby providing higher quality of information for betterdecision making by managers. According to Apulu and Latham (2011), the rapid development of ICT has changed the conventional way of conducting businesses in many organizations, while Erumban and de Jong (2006) advocate that ICT has created a revolution by making the world seem smaller and improving potential economic growth.

1.2.1 Concepts and Theories of ICT Adoption:

So far, many theories and models have been proposed to interpret the adoption of ICT in a system. Studies on ICT adoption tend to take three (3) main approaches according to Pedersen (2003), namely the adoption approach, the domestication approach and the diffusion approach.

(a) Adoption Approach:

In this approach, social and individual decision-making concepts are applied in order to explain the adoption decision of users. Some well-known models in this sphere are; Technology Acceptance Model (TAM), Theory of Reasoned Action (TRA), and Theory of Planned Behavior (TPB). The TAM suggests that when individuals are presented a new technology, a number of factors influence their decision about how and when they will use the said technology (Manueli, Latu, & Koh, 2007). These factors are perceived usefulness and perceived ease of use. These theory was introduced by Davis (1989) and has since then been used by many scholars in the technology adoption elated studies. TAM is sometimes criticized for not controlling external factors (variables) such as economic factors, influence from competitors, suppliers and other effects in its analysis of the decision-making factors. The Theory of Reasoned Action (TRA), which was introduced by Fishbein and Ajzen in 1975 and 1980 respectively, has been integrated into the TAM to overcome some of its weaknesses. The TRA is based on behavioral intentions; one's attitude towards performing the behavior and one's subjective norm with respect to performing a behavior. Theory of Planned Behavior (TPB) is an extension of the TRA. It deals with conditions where the individual has no control of their behavior (Manueli, Latu, & Koh, 2007). This model has been applied to decipher people's behavior in several fields such as public relations, advertising campaigns and others. Studies of Adoption of new technologies are usually applied for marketing research. As industry players can use this model to evaluate the adoption potential of a new product. For example, Pedersen (2005) in his study on the adoption of mobile internet services found that there was a significant relationship between perceived usefulness of the technology and external influences such as disposable income of households. This kind of findings can help the service provider when trying to sell his product in a new locality.

(b) Domestication Approach:

Domestication approach focuses on the process in which technology becomes an integral part of our everyday habits (Manueli, Latu, & Koh, 2007). Thus, it emphasizes on the process by which a technology find its way into our day-to-day activities. This approach emerged from an empirical and theoretical projects influenced by emerging literature on consumption in the early 1990s (Katz, 2003). Pederson (2005) suggests that domestication research findings should be used to provide a model that would explain the adoption of complex technologies such as mobile telephony services. Studies of this sort could be aimed at explaining the adoption process or describing the consequences of a new product's use from a social perspective. Fischer (1992) using a domestication approach analyzed how the telephone technology permeated and transformed the essence of daily activities. Other technologies that have been studied using this approach are television and personal computers (Silverstone & Haddon, 1996). Here, they focused on explaining the dynamics of innovation, by privileging the role and perspective of the consumer. In other words, they looked at ICT as a social and cultural process.

(c) Diffusion Approach:

A classical diffusion approach is Rogers diffusion of innovation theory. Rogers diffusion of innovation theory involves the process by which an innovation is communicated through certain channels over time among the members of a social system (Rogers, 1962). Here, the characteristics of the innovation as perceived by the members of a social system, determine its rate of adoption. This theory comprises four elements: innovation, communication channels, time and the social system. In sum, new ideas are conveyed through networks and depending on the nature of the network and the role of its opinion leaders, the innovations are either adopted or rejected (Manueli, Latu, & Koh, 2007).

1.2.2 Benefits of ICT:

The benefits of ICT cut across all sectors of the economy and all fields of human activities. ICT is said to improve the standard of living and enhance business operations as well as organizational efficiency (Udo and Edoho, 2000; Ion and Andreea, 2008). Fullanteli and Allegra (2003) state that ICT offer enterprises a wide range of possibilities for improving their competitiveness. It is commonly accepted that ICT offers many potential benefits to organizations so as to make them more efficient, effective and competitive (Fink and Disterer, 2006). Niamsorn et al. (2011) state that ICT has transformed and changed the way people work and communicate in organizations. According to Ion and Andreea (2008) ICT enables companies to communicate, collaborate and conduct transactions internally with their customers and suppliers, as well as distributors via the internet. ICT also allows companies to obtain and process, accumulate and exchange information.

Ion and Andreea (2008) and Apulu and Latham (2011c) comment that with ICT, organizations can exchange real-time information and build closer relationships with their customers, suppliers and business partners. Also, customers can receive immediate feedbacks that allow companies to react faster to customers' changing demands and to recognise new market niches.According to Fullanteli and Allegra (2003), ICT provides mechanisms for gaining access to new market opportunities and specialised information services such as distance consulting, continuous training, new advisory modes, and so on. This implies that organizations that are able to exploit the potentials offered by ICT can handle innovative processes such as Supply Chain Management (SCM), Customer Relationship Management (CRM) and Knowledge Management (KM) more effectively (Fullanteli and Allegra, 2003). Modimogale and Kroeze (2009) state that ICT can fulfil a number of business needs such as strategic, operational and marketing needs or a combination of all of them. Manecke and Schoensleben, (2004) argue that ICT is vital for a company's external relationships, particularly the cross-company workflow. It also helps in sending and retrieving information both within and across diverse organizations and has contributed significantly to the closing of communication gaps (Mouelhi, 2008).

According to Brynjolfsson and Hitt (2000), the use of ICT can help to cut down the costs of coordination, communication, information processing and also enable efficient service provision at lower cost. Sewanyana (2009) describes ICT as a strategic tool that enables users to become efficient and effective. Kajogbola (2004) argues that users and suppliers can now communicate more easily and faster with the use of ICT, such as by electronic mail (E-mail). ICT provides quicker responses to market needs and allows more flexibility in product design, production and equipment delivery. In addition, ICT opens more opportunities for training, and the re-training of existing staff in the mastery of the new and sophisticated

equipment (Mouelhi, 2008). In other words, the use of ICT has led to the acquisition of additional capabilities by employees in many organizations.

Moreton and Chester (1997) stress that there are some organizational initiatives that is impossible to realise without the use of ICT. It provides an unparalleled method of processing, analysing and communicating the information from both inside and outside business which is needed to detect and understand the patterns and pace of change. Moreton and Chester (1997) further state that ICT has the potential to assist businesses enormously by supporting the drive for increased customer satisfaction and enabling the streamlining of business processes (including links to suppliers and customers). Also, Lefebvre and Lefebvre (1996) identify the sociological and psychological impacts of ICT on employees in the workplace. Hence, Mouelhi (2008) concludes that the introduction of ICT applications in a firm has impacts on work-group effectiveness, organizational climate, job satisfaction, personal growth and accomplishments.

III. ICT Adoption in Developing Countries

A number of researches have been conducted on the adoption of ICT in both developed and developing countries (e.g. Ritchie and Brindley, 2006; Arendt, 2008; Hazbo et al., 2008; Harindranath et al., 2008b; Ongori, 2009; Mpofu et al., 2009). However, this section concentrates on ICT adoption on developing countries since the country under investigation is referred to as a developing country. Kamel (1995) conducted a study on ICT adoption in Egypt and identified ICT as a tool for socio-economic and cultural development. Hassan (1998) also conducted a study on ICT in Pakistan and proposed a framework for the IT industry development in Pakistan. Furthermore, Harindranath and Libenau (1995) conducted a research on issues affecting the Indian software industry with regard to changing State policy and increasing liberalisation in the Indian economy. Straub et al. (2001) also developed a model for the transfer of IT to the Arab world and highlighted the importance of transferring IT to developing countries. The study was able to assess the cultural influence of the Arab world with regard to transferring IT. Heeks (2008) conducted a research on ICT based enterprises in developing countries and concluded that ICT in developing countries can be analysed at various levels. Nonetheless, Ashrafi and Mutarza (2010) suggest the need for more studies on ICT adoption in developing countries.

Sulaiman (2010) states that ICTs are expanding the possibilities for developing economies to participate in international markets. The internet, for instance, has changed the method in which goods and services are processed, delivered, sold and purchased. In other words, ICT has led to an ever growing number of people and businesses connected digitally. In the 21st century, ICT is regarded as an essential tool for businesses both in developed and developing countries. This is because ICT can assist businesses to remain competitive in both domestic and international markets (Kew and Herrington, 2009).

The diffusion of ICT in many countries by different sectors of the economy has been found to have a direct, positive impact on organizational efficiency and has played a role in the rapid development of these countries (Achimugu et al., 2009). Sahlfeld (2007) states that there is no indication that the benefits of ICT experienced by developed countries, such as reduced business costs and increased access to information, would not also amass to that of developing countries. According to Sahlfeld (2007), the main importance of ICT to businesses in developing countries is to access timely and accurate information regarding the supply of and demand for products and services in various markets. Meanwhile, some researchers have focussed their attention on how ICT may promote development in developing countries. For example, the Parliamentary Office of Science and Technology (2006) has identified that ICT can help developing countries tackle a wide range of health, social and economic problems by improving access to information and by enabling communication. ICT can also play a role in reaching millennium development goals such as the elimination of extreme poverty, combating serious disease and achieving universal primary education and gender equality. Similarly, the OECD (2004) growth study concluded that ICT is a key input to productivity and growth performance. However, the benefits of ICT are still not fully realised in many countries, as ICT is often out of reach to the poor and those in rural areas. Terero and Von Braun (2005) observe that although the use of ICT remain concentrated largely in the developed world, nonetheless ICT diffusion is beginning to reach developingcountries including the poor rural areas, bringing with it high hopes of positive development outcomes. While technological innovations such as mobile phones and wireless broadband access are playing an important role in building ICT levels globally, strong inequality still remains. Developing countries are still well behind developed countries in access to ICT (Terero and von Braun, 2005). Al-Shaikh (1998) notes that the "technological environment and the infrastructure of developing countries are still lagging behind the Western Countries".

Ihua (2009) states that developing countries are lagging behind, probably because the developed nations produce the technology, while the developing nations import it. Also, Beekhuyzen et al. (2005) note that access to ICT continues to be a global problem especially in developing countries. This shows that countries are digitally divided due to lack of access and availability of ICT. Mouelhi (2008) advocates that the adoption of ICTs, such as internet, mobile telephony and broadband networks, in many developed countries has been found to have a positive effect on organizations' performance, yet not all countries are taking advantage of the revolution in the same way and at the same pace.

The World Bank report (2006) confirms that "firms which use ICT grow faster, invest more, and are more productive and profitable than those that do not". Many studies that cover the experience of developed countries conclude that there is a positive relationship between the use of ICT and performance (Baldwin and Sabourin, 2001). According to Mouelhi (2008), the greatest benefits of ICT are realised when ICT investment is combined with other organizational changes and human capital upgrade. Also, Obijiofor et al. (2005) perceive ICT to be a major tool for kick-starting ailing economies and consequently in assisting developing societies to 'catch up' with the developed world. Still, Golding et al. (2008) affirm that there is a digital divide which shows that ICT adoptions vary between developed and developing countries with developing countries adopting ICT at a slower rate due to several factors militating against them.

1.3.1 Factors affecting ICT Adoption in Developing Countries:

A developing country is described as a country in which most people have a low income and low standards of living with less access to goods and services as compared to most people in higher-income countries (Leslie and Gaskill, 2006). Developing countries face almost insurmountable barriers to accessing the electronic highway (Kapurubandara and Lawson, 2008). The problems of ICT in

developing countries have been grouped intoseveral categories. Some researchers have attributed these problems to organizational factors, environmental factors and lack of technical skills, amongst others. However, Okotuma in Kunda and Brooks (2000) suggests that the problems of introducing ICT such as e-commerce in developing countries can be classified into three generic categories: contextual, strategic and operational.Contextual problems are the result of a poor match of models of developed countries' designs and applications to the developing countries context. Strategic problems relate to local, national and regional policy initiatives. Operational problems are faced by developing countries due to technical and economic constraints which include the non-existence of reliable background statistical information and inadequate capital to finance ICT and lack of skilled personnel (Kunda and Brooks, 2000). The issue of a deficiency of skilled human resources, economic constraints, system infrastructure deficiencies and application problems are also regarded as factors that affect developing countries in their quest to adopt ICT. Woherem (1993) states that the lack of skilled human resources is a principal barrier blocking the diffusion and effective utilisation of ICT in developing countries. Nonetheless, several developing countries suffer from both a lack of resources and a limited domestic market.

Meanwhile, some developing countries import ICT due to lack of indigenous ICT industries. According to Kunda and Brooks (2000), scarcity of foreign currency makes developing countries depend upon donor agencies for much of their ICT imports. Kari (2007) states that much of the developing world still lacks the most basic forms of information and communication infrastructure. Kapurubandara and Lawson (2006) consider the lack of telecommunication infrastructures, such as poor internet connectivity, lack of fixed telephone lines for end user dial-up access, and the underdeveloped state of the Internet Service Providers (ISPs), as factors affecting the proper utilisation of ICT such as e-commerce, in a developing country such as Sri Lanka. In developed countries, ICT has been used to change the manner in which businesses are conducted in order to have some forms of strategic advantage. Iacovou et al. (1995) and Mehrtens et al. (2001) argue that not all organizations are strongly inclined towards adopting ICT. Premkumar et al. (1994); Iacovou et al. (1995); Crook and Kumar (1998); Payton (2000) and Beatty et al. (2001) state that the extent of ICT adoption depends on theattitude of the organisation towards ICT technologies and the inclination or the propensity to deploy and use them. However, some authors (e.g. Davis et al., 1989; Rogers, 1995; Venkatesh and Davis, 2000) argue that these findings match studies on the individual acceptance of technology and the diffusion of innovations in organizations (Cooper and Zmud, 1990). Therefore, Tarafdar and Vaidya (2006) recommend that understanding the fundamental factors behind the differences in organizational inclination with regard to technology adoption is essential, to enable organizations to assess the extent to which they are inclined to develop, deploy and use technologies. According to Ginsberg and Venkatraman (1992), different managers and organizations adopt different attitudes towards ICT depending on its perceived usefulness in the context of their work and organizational norms regarding the acceptance of new ICT.Checchi et al. (2003) and Roztocki et al. (2004) state that there is an imbalance of scholarly studies in the area of understanding the role of ICT in developing countries. Also, Prasad (2009) asserts that the lack of scholarly focus tends to hinder the development and use of ICT in developing countries since businesses lack the vital information that could provide directions for the successful use of ICT. Weiner and Rumiany (2007) further state that the implementation of ICT in the developing world is often inhibited because the infrastructure, human capital development and financial resources that are necessary to implement ICT effectively, are either absent or of a poor quality. They argue that ICT policies adopted in developing countries have the ability to increase (rather than decrease) the digital divide within countries, and in so doing make it even more difficult for businesses in rural areas to compete. They justify this point by arguing that when new technology is introduced in developing countries, it is usually made available in urban areas that have the required infrastructure and market, thereby making those areas become more competitive. With the rapid advances in technology there is a growing fear that rural areas, which are already hampered by large distances from markets and plagued with poorer quality infrastructure, will be further disadvantaged by their lack of ICT (Kew and Herrington, 2009).

1.3.2 Factors affecting ICT Adoption in SMEs in Developing Countries:

A developing country is described as a country in which most people have a low income and low standards of living with less access to goods and services as compared to most people in higher-income countries (Leslie and Gaskill, 2006). Developing countries face almost insurmountable barriers to accessing the electronic highway (Kapurubandara and Lawson, 2008). The problems of ICT in developing countries have been grouped intoseveral categories. Some researchers have attributed these problems to organizational factors, environmental factors and lack of technical skills, amongst others. However, Okotuma in Kunda and Brooks (2000) suggests that the problems of introducing ICT such as e-commerce in developing countries can be classified into three generic categories: contextual, strategic and operational.Contextual problems are the result of a poor match of models of developed countries' designs and applications to the developing countries context. Strategic problems relate to local, national and regional policy initiatives. Operational problems are faced by developing countries due to technical and economic constraints which include the non-existence of reliable background statistical information and inadequate capital to finance ICT and lack of skilled personnel (Kunda and Brooks, 2000)

Main management attitudes assume a key part towards those reception for ICT in associations What's more this is viewed Likewise an element that influences those reception about ICT for Smes done creating nations. Those highest point oversaw economy about any association may be answerable for deciding the proper culture, dream Also arrangement of the association (Singh, 2008). Previously, SMEs, chiefs assume a paramount part in choice making What's more By and large they are normally those managers of the business. As stated by Grover (1993), Premkumar What's more Ramamurthy (1995), criminal What's more Kumar (1998) What's more Tarafdar What's more Vaidya (2006), a proactive approach Also dynamic title on the and only highest point directors could prompt the effective selection from claiming ICT. Yap et al. (1992) advocate that oversaw economy contribution is urgent of the prosperity of ICT Previously, Smes. Sarkar (2008) contends that help starting with top banana management or the owner/manager will be a precondition to great ICT selection clinched alongside Smes. Matlay Also Addis (2003) Additionally remark that those choice will receive ICT Eventually Tom's perusing Smes is probable on a chance to be settled on Toward the manager. Similarly, thong (1999) contends that backing from the CEO (CEO) might absolutely impact the probability for engineering organization selection. Macgregor (2004) and also Xu Also Quaddus (2004) demonstrate that the CEO's instructive level is fundamentally connected with the choice to innovation organization selection.

Thus, it could be said that those qualities of the owner-manager might help make An certain organisational state of mind towards those selection from claiming ICT done Smes. As stated by Tarafdar Also Vaidya (2006), pioneers might impact the degree from claiming ICT selection Toward obviously characterizing those part of those new engineering. Payton (2000) ascertains that highest point oversaw economy regularly gives the forward movement for those start for engineering organization undertakings. Main management assumes a paramount part clinched alongside directing Also finishing tasks identifying with ICT adoption, by giving work to assets for those buy of the infrastructures needed to the new ICT. This infers that An leader's capability for giving work to assets to ICT activities might positively influence an organisation's slant should receive ICT.

As stated by Culkin Furthermore smith (2000) What's more Matlay (2000) it will be those obligation of the little benefits of the business owner/manager will perceive chances Also dangers inside their decided target business. In place to improve net benefit Furthermore income and also diminish cost, owners/managers must pass on their necessities Also desires to their representatives (Singh, 2008). O'Regan et al. (2005) have Additionally watched that heading organizations tend on need higher levels from claiming job with more terrific association Eventually Tom's perusing Main management On key issues for example, staff headway and disciplinary matters. In other words, the accomplishment of little organizations will be by and large attributed should manageress skills, training, education, What's more personal foundation of the company's pioneers. Owner/managers must create an arrangement that motivates specialists should surmise and demonstration flexibly Furthermore productively should meet those company's objectives (Singh, 2008). Furthermore, Harindranath et al. (2008a) highlight that little organizations are liable with bring An overwhelming dependence on the finesse Furthermore motivations of an owner/manager, especially Previously, their specialized foul adroitness What's more state of mind towards ICT, Likewise this might influence the company's capacity What's more eagerness to captivate for ICT matters. Iacovou et al. (1995) affirm that a owner's absence of familiarity with the innovation organization and its discerned profits will be a real obstruction of the consume for ICT. Similarly, Julien and Raymond (1994) consent that the owner's level about emphaticness for choice making might influence the reception of ICT. However, for the vast majority cases, Akkeren and Cavaye (1999) state that SME owners need aid just worried for a profit with respect to investments, Consequently they would hesitant to aggravate generous ventures At transient returns need aid not guaranteed. Moreover, it may be the ability and energy of the owner/manager that normally drives those benefits of the business forward Also shapes the character of investment choices (Kapurubandara Furthermore Lawson, 2006; Dyerson et al. , 2009). As stated by Dyerson et al. (2009), practically Smes slack behind vast organizations over their utilization of ICT both operationally and strategically. Caldeira and Ward (2002) state that the Normal SME may be described by an absence about manageress abilities will conceive, arrangement and execute ICT, and has a tendency not on overhaul innovation a really promptly. Pool et al. (2006) and Dyerson et al. (2009) demonstrate that extensive organizations need aid as a rule quick on receive ICT while the pace from claiming selection amongst Smes will be considerably slower. Therefore, it may be clear that owners/managers need aid answerable for creating, forming What's more Creating the benefits of the business for an SME What's more also assume a magic part in the reception and usage about ICT in Smes. Sarkar (2009) confirms this Toward saying that those qualities about highest point directors would vital for figuring out those imaginative disposition from claiming little organizations.

Absence of fund is also an element which influences the reception from claiming ICT inside Smes in creating nations. Fund is seen as a discriminating component for those advancement about Smes (Cook Furthermore Nixson, 2000). Dyerson et al. (2009) advocate that Smes by and large battle for constrained assets As far as time, cash What's more smoothness. Demand (1993) emphasises that the set right to budgetary assets accessible on more diminutive enterprises, as contrasted with bigger organisations, and the results for SMEs' development improvement need aid elements that influence ICT reception Previously, Smes. As stated by Wymer What's more Regan (2005), Smes by and large battle with rare assets As far as time, cash and adroitness. Smes likewise must adapt to contending requests and would frequently all the trade poor. Arendt (2008) identifies elements for example, the expense for ICT gear Furthermore networks, software, Also re-organisation as obstructions with ICT selection to the vast majority Smes.

Previously, Numerous SMEs, money asset and additionally immaterial holding advantages for example, such that knowledge, adroitness and time, would rare. SME directors use all the an incredible arrangement of their duration of the time attempting should stretch An firm's constrained assets Concerning illustration far Likewise could reasonably be expected. Pool et al. (2006) state that allocating rare assets on another activity for example, such that ICT selection obliges a genuine promise. Therefore, Priem and head servant (2001) propose those need to Smes on bring a consolidation from claiming assets What's more abilities so as on have A percentage sort aggressive point. A SME could set itself separated starting with its contenders though it chooses should put resources into ICT as this will realize An manageable aggressive preference. As stated by Andrade Furthermore Urquhart (2009), Smes that need aid readied to coordinate ICT provisions must succeed both asset What's more economy of scale tests. The absence of knowledge/awareness something like how to utilize the technology, low machine education and poor management techniques (e. G. Kirby Furthermore Turner, 1993; Costello et al. , 2007) need aid different factors which influence SMEs' reception for ICT to creating nations. Chibelushi Also Costello (2009) argue that absence of mindfulness might bring about Smes not understanding those potentials which advances could give acceptable in the regions from claiming effectiveness upgrade Furthermore gainfulness. Consciousness need a sure impact with respect to an organisation's slant will receive ICT (Tarafdar What's more Vaidya, 2006). Koh and Maguire (2004) and taymyr landmass Also murphy (2004) clarify that practically Smes are for the most part unconscious of the possibility of ICT should upgrade their benefits of the business operations.

Done The greater part cases, Smes don't bring professionally qualified What's more budgetary business consultative benefits that might aide them Previously, connection to evolving technology, administration forms What's more polishes (Nguyen et al. , 2008). The The greater part huge obstacle should Smes exploiting the developing chances Previously, An knowledge-based economy may be their disappointment to adapt to progressions in the business nature's domain (Wickramasinghe Also Sharma, 2005). As stated by friar (2000), Similarly as economies ended up additional associated with the advanced marketplace, SMEs' familiarity with administration techniques and instruments need aid fundamental will make aggressive focal point. Consequently, owner/managers' presentation will ICT innovation through collaborations for vendors What's more professional acquaintanceships increments their mindfulness and Comprehension.

Furthermore, the absence of correct direction is an element that influences the selection from claiming ICT amongst Smes over creating nations. Smes oblige correct direction to making those good decision for engineering suitableness to their needs (Sharma et al. , 2005). Jordan (2002) watched that a number Smes don't have those ability, time or vitality will proceed onward with new technology, Possibly because of absence of finesse at their level or nonattendance about correct guidance, exhortation What's more help starting with stakeholders. As stated by jordan (2002), Smes don't best way this absence data on the accessibility Also sources from claiming new technology, they Additionally need An asset build for looking to proper accomplices.

Clinched alongside addition, those organisational societies about a lot of people Smes Previously, creating nations ruin them from adopting ICT. Punnett and Ricks (1990) define societal/organisational society Likewise an imparted situated of values which may be ordinary of the individuals inside the society/organisation What's more this need a bearing looking into how advances would embraced. Tarafdar What's more Vaidya (2006) remark that those challenge to directors will be with develop a organizational society that backs improvement. As stated by them, investigations propose that the center qualities of a firm camwood impact the firm towards picking a specific key elective or engineering organization. Singh (2008) states that society and social fit are All the more significant done Smes over other associations. This may be in view Smes have the probability from claiming being actually concealed over person society while clinched alongside huge associations a few societies might make exhibit. Ghobadian What's more Gallear (1996) argue that it will be less demanding should accomplish social progress On Smes over Previously, expansive associations. However, it will be most likely All the more challenging for SMEs' management with distinguish the necessity for change. Besides, The greater part Smes don't have societies that help the examination for new Furthermore inventive plans that are identified with ICT. Examinations ahead new What's more imaginative thoughts inside Smes bring An sure impact around directors As far as Creating Furthermore adopting provisions about new engineering (Apulu and Latham, 2009c). Hoffman Furthermore Klepper (2000) state that a society for which thoughts What's more innovations with admiration to ICT would uninhibitedly imparted might possibly help should fortify those organisational slant towards new ICT selection. Furthermore, Mehrtens et al. (2001) state that a positive position organisational state of mind towards frameworks improvement increments the reception about ICT innovations. Clinched alongside addition, Olutimayin (2002) says that engineering organization may be itself and only society. Those presence from claiming An mechanical transformation change presupposes social acknowledgement. Along these lines In a specific innovation will be not received clinched alongside a society, that engineering might not manifestation and only the society's society What's more camwood extraordinarily influence the society about that culture (Olutimayin, 2002). Societal society is accordingly a critical organisational determinant to ICT selection..

1.3.2 Factors affecting ICT Adoption in Hotel Industry:

Despite intense dispute amongst researchers on the direction of influence between ecommerce adoption, and hotel industry growth, clear understanding is not yet settled. Most of the studies in this perspective suffer from methodological problems of missing variables, conceptual vagueness, and some provide mixed result.However, one the study that tries to resolvers these controversies of the direction of influence is the work of Radaideh and Salim (2004), who introduced factors of ICT adoption decision in a case of hotel industry. They argue that there are critical factors affecting the adoption of e-commerce by hotels which are classified into two main categories; internal and external factors. Internal factors are within the hotels and external factors are environmental in nature.

Internal factors are IT readiness which refers to the level of IT usage within the hotel. This category includes information and networking security, system interrelation, data conversion, hardware and compatibility, adequacy of the hotels, IT infrastructure and migration from legacy system (Graham and Cobham, 2006). The second internal factor category refers to the hotel industry financial readiness. Graham and Cobham (2006) argued that financial readiness is reflected by the top management's willingness to fund an e-commerce adoption project. The major cost of e-commerce adoption is the cost of educating and training management and employees to use e-commerce (Graham and Cobham, 2006). Another concern of the top management is the losses of productivity due to abuse by IT staff readiness factor category refer to the IT and e-commerce literacy level inside the hotel. Software compatibility, adequacy of the hotels, IT infrastructure and migration from legacy system (Graham and Cobham, 2006). The second internal factor category refers to the hotel industry financial readiness. Graham and Cobham (2006) argued that financial readiness is reflected by the top management's willingness to fund an e-commerce adoption project. The major cost of e-commerce adoption is the cost of educating and training management and employees to use e-commerce (Graham and Cobham, 2006). Another concern of the top management is the losses of productivity due to abuse by IT staff readiness factor category refer to the IT and e-commerce literacy level inside the hotel.

Management support is another important internal factor category, Graham and Cobham (2006) state that this category represents the extent to which the top management recognizes the importance of e-commerce adoption. The recognition is reflected in the support and leadership of top management executives in e-commerce adoption process (Grover, 1993; Thong, 1999; Godenhielm, 1999; Tabor, 2003). The hotel internal culture refers to the collaboration level and style among the different managerial levels and team spirit and dedication to the business processes. Hotel size is one of the main reasons for not adopting e-commerce. Large hotel have more resources and infrastructure to facilitate implementation of e-commerce adoption projects. The anticipated financial and managerial benefits are important factors affecting the adoption decision.

There are several external factor categories to be considered. The first two categories include pressure exerted by competitors on a hotel. Tabor (2003) argues that competitive intensity increases the need for e-commerce adoption by hotels. The competition leads to environmental uncertainty and increases the need and rate of adoption. Allen (2000) emphasized the importance of trust in maintaining productive adoption of e-commerce. Culture which explain the complete way of life of the society play a significant role in Ecommerce adoption, because it has been considered as a critical factor affecting e-commerce adoption (Ranganathan, 2003). Furthermore, customer pressure on the hotel to adopt e-commerce is also considered an important category. They stated that the industry to which the hotel belongs affects the adoption decision. The nature of government equally, is among the most important factor groups affecting e -commerce adoption. Ranganathan, (2003) rightly argues that government needs to buildknowledge and set standards. Policies and regulations are also

important factors at the local and global stages. Radaideh and Salim (2004) explained the main factors affecting e-commerce adoption among the hotel in developing countries but did not develop a solution for e-commerce adoption. Another matter to be addressed is that they separated the external and internal factors as different issues where in reality these two factors are interrelated, for example IT readiness depends on the external and internal factors together and cannot benefit the organization if one is used without the other.

Insights from the review of the literature suggest that SMEs play a significant role in the economic development of every country and India is no exception. The literature review also confirms that a large percentage of organizations in developed and developing countries are SMEs or belong to the SME sector. Likewise, it has been noted that ICT is a driver of change in many organizations.

The benefits of ICT cut across all sectors and its role in SMEs is crucial. Thus the adoption and effective utilisation of ICT should be considered by SMEs in India since ICT can help in the advancement of their businesses. ICT is regarded as a competitive tool for every organisation in this present era of globalisation, therefore Indian SMEs should adopt and effectively utilise it. Factors such as the lack of electricity, poor internet connectivity, lack of resources amongst many others has been highlighted as possible factors affecting the adoption and proper utilisation of ICT applications by SMEs, including Indian SMEs, which is the focus of this research.

1.3.3 ICT and Business Performance:

The management literature recognizes numerous concepts and variables to measure performance. For example, March and Sutton (1997) mention profits, sales, market share, productivity, debt ratios and stock prices. Ittner et al. (1997) differentiate between financial and non-financial measures of performance. TheeffectsofICTon corporateperformancearesubjecttodebatebecausen otall studies have demonstrated clear payoffs from ICT investments(Chan, 2000, Kohli and Devaraj, 2003). For example, one empirical study finds positive impacts of ICT investments on productivity, but not on profits (Hitt and Brynjolfsson, 1996). Another study did not find positive effects of ICT capital on productivity, while ICT labor positively contributed to output and profitability (Prasad and Harker, 1997).

Positive effects of ICT investments and ICT usage on revenue growth have been demonstrated in the health care sector (Devaraj and Kohli, 2000, 2003). Similar results were found in the insurance industry where top performing firms with high premium income growth had higher ICT expense ratios and lower non-ICT costs (Harris and Katz,1991).In addition, positive effects of ICT investment on sales growth were found among valve manufacturing firms(Weill,1992).

IV. Concluding Remarks

This chapter has presented a review of the literature in relation to ICT adoption and SMEs thereby defining the scope of the research.ICT is said to be an integral part of the development process of any country and is indispensable to the operation of core routinesin SMEs. This chapter has also described the characteristics of SMEs, which differentiate them from large organisations, and has discussed the role of SMEs in the economic development of every country including that of India. The adoption of ICT is said to be vital for SMEs' survival since it provides them with the opportunity to compete with larger organisations and operate on an international scale. This chapter has also identified some benefits of ICT adoption in SMEs which confirms that the effective use of ICT can assist SMEs to experience some strategic advantages. ICT is said to be influenced by a number of characteristics such as the role of the owner/manager, the level of government commitment and so on. The identification of relevant literature on SMEs and ICT as well as factors that affect the adoption of ICT forms the basis of the research. The literature review shows that there exists a digital divide between developed and developing countries and concludes that SMEs in India still lag behind in the adoption and use of ICT in the current knowledge based economy.

References

[1] Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: a comparison of two theoretical models. Management science, 35(8), 982-1003.

[2] DeLone, W. H. (1988). Determinants of success for computer usage in small business. Mis Quarterly, 51-61.

[3] Devaraj, S., & Kohli, R. (2003). Performance impacts of information technology: Is actual usage the missing link?. Management science, 49(3), 273-289.

[4] DeVellis, R.F. (2003). Scale Development: Theory and Applications, 2nd ed., Sage Publications, Thousand Oaks, CA.

[5] Dholakia, R. R., & Kshetri, N. (2004). Factors impacting the adoption of the Internet among SMEs. Small Business Economics, 23(4), 311-322.

[6] DTI (2001). International Bench Marking Survey for ICT Use: UK Department of Trade and Industry, London.

[7] Dyerson, R., Harindranath, G., & Barnes, D. (2009). National survey of SMEs' use of IT in four sectors. The electronic journal information systems evaluation, 12(1), 39-50.

[8] Erumban, A. A., & De Jong, S. B. (2006). Cross-country differences in ICT adoption: A consequence of Culture?. Journal of World Business, 41(4), 302-314.

[9] Etemad, H. (1999). Globalization and the small and medium-sized enterprises: search for potent strategies. Global Focus, 11, 85-104.

[10] European Commission (2008). Making SMEs more competitive [online]. Available at: http://ec.europa.eu/enterprise/sme/competitive_en.htm.[Accessed 30 October, 2013].

[11] Evans, P. B., & Wurster, T. S. (1997). The new economics of information. Harvard business review, 5, 71-82.

[12] Fink, D., & Disterer, G. (2006). International case studies: to what extent is ICT infused into the operations of SMEs?. Journal of Enterprise Information Management, 19(6), 608-624.

[13] Fischer, C. S. (1992). America Calling A social History of the Telephone to 1940. California: University of California Press, Ltd.

[14] Frempong, G. (2007). Trends in ICT usage by small and medium scale enterprises in Ghana. ATDF Journal, 4(1), 3-10.

[15] Fulantelli, G., & Allegra, M. (2003). Small company attitude towards ICT based solutions: some key-elements to improve it. Educational Technology & Society, 6(1), 45-49.

[16] Ghobandian, A. and Gallear, D. N. (1996). Total quality management in SMEs. Omega, 24(1), 83-106.

[17] Gholami, R., Koh, E., & Lim, J. (2010). The post-adoption phase of broadband in small businesses. Information Resources Management Journal (IRMJ), 23(1), 35-52.

[18] Gibbs, J. L., & Kraemer, K. L. (2004). A cross-country investigation of the determinants of scope of e-commerce use: An institutional approach. Electronic markets, 14(2), 124-137.
[19] Ginsberg, A., & Venkatraman, N. (1992). Investing in new information technology: The role of competitive posture and issue diagnosis. Strategic Management Journal, 13(S1), 37-53.
[20] Godenhielm, G. (1999). Critical Success Factors in E-commerce: Consulate General of Finland and the Finland Technology Center in Las Angeles.
[21] Golding, P., Donaldson, O., Tennant, V. and Black, K. (2008) An analysis of factors affecting the adoption of ICT by MSMEs in rural and urban Jamaica [online] http://is2.lse.ac.uk/asp/aspecis/20080109.pdf. [Accessed 15th May, 2014]
[22] Graham, C., and Cobham, D., (2004). Business Information Systems, 5th Edition, published by Prentice Hall.
[23] Grover, V. (1993). An Empirically Derived Model for the Adoption of Customer-based Inter-organizational Systems. Decision sciences, 24(3), 603-640.
[24] Hagmann, C., & McCahon, C. S. (1993). Strategic information systems and competitiveness: Are firms ready for an IST-driven competitive challenge?. Information & management, 25(4), 183-192.
[25] Hair, J. F., Andreson, R. E., Tatham, R. L., & Black, W. C. (1998). Multivariate data analysis. 5th (ed) Prentice-Hall Inc. Unites States of America.
[26] Harindranath, G., & Liebenau, J. (1995). State policy and India's software industry in the 1990s.Managing Information and Communications in a Changing Global Environment, Idea Group Publishing, 170-175.
[27] Harindranath, G., Dyerson, R., & Barnes, D. (2008). ICT adoption and use in UK SMEs: A failure of initiatives. Electronic Journal of Information Systems Evaluation, 11(2), 91-96.
[28] Harris, R. W. (2002, December). ICT for poverty alleviation framework. In Workshop for UNDP country office ICT programmes officers/Focal points in Asia-Pacific.
[29] Hasan, H. (1998). Activity theory: A basis for the contextual study of information systems in organisations. Information systems and activity theory: Tools in context, 19-38.
[30] Heeks, R. (1999). Information and communication technologies, poverty and development. Manchester, UK: Institute for Development Policy and Management, University of Manchester.
[31] Heeks, R. (2008) Researching ICT-Based Enterprise in Developing Countries: Analytical Tools and Models. Development Informatics Working Paper Series, Paper No 30 [online]. Available at: http://www.sed.manchester.ac.uk/idpm/research/publications/wp/di/documents/di_wp30.pdf.[Accessed 18thJuly, 2014].
[32] Hitt, L. M., & Brynjolfsson, E. (1996). Productivity, business profitability, and consumer surplus: three different measures of information technology value. MIS quarterly, 121-142.
[33] Hoffman, N. and Klepper, R. (2000). Assimilating new technologies. Information Systems Management, 17(3), 36–42.
[34] Houghton, K. A., & Winklhofer, H. (2004). The effect of website and e-commerce adoption on the relationship between SMEs and their export intermediaries. International Small Business Journal, 22(4), 369-388.
[35] Hudson, M., Smart, A., & Bourne, M. (2001). Theory and practice in SME performance measurement systems. International journal of operations & production management, 21(8), 1096-1115.
[36] Iacovou, C. L., Benbasat, I., & Dexter, A. S. (1995). Electronic data interchange and small organizations: adoption and impact of technology. MIS quarterly, 465-485.
[37] Ihua, U. B. (2009). SMEs key failure-factors: a comparison between the United Kingdom and Nigeria. Journal of Social Science, 18(3), 199-207.
[38] Internet usage statistics. (2014). Retrieved November 15, 2014, from http://www.internetworldstats.com/
[39] Ion, P., & Andreea, Z. (2008). Use of ICT in SMES management within the sector of services. The Journal of the Faculty of Economics-Economic, University of Oradea, Faculty of Economics, 4(1), 481-487.
[40] Ittner, C. D., Larcker, D. F., & Rajan, M. V. (1997). The choice of performance measures in annual bonus contracts. Accounting Review, 231-255.
[41] Jennex, M. E., Amoroso, D., & Adelakun, O. (2004). E-commerce infrastructure success factors for small companies in developing economies. Electronic Commerce Research, 4(3), 263-286.
[42] Jeon, B. N., Han, K. S., & Lee, M. J. (2006). Determining factors for the adoption of e-business: the case of SMEs in Korea. Applied Economics,38(16), 1905-1916.
[43] Johnson-Leslie, N., & Gaskill, L. R. (2006). Small business apparel retailing in Jamaica: an exploratory investigation into product development processes and practices. The Qualitative Report, 11(3), 417-449.
[44] Jones, I. (1997). Mixing qualitative and quantitative methods in sports fan research. The Qualitative Report, 3(4), 1-8.
[45] Jordan, T. (2002). Transform your business. Asian Business, 36(5), 30-32.
[46] Julien, P. A. and Raymond, L. (1994). Factors of New Technology adoption in the retail sector. Entrepreneurship: Theory and Practice, 18(5), 79-90.
[47] Jutla, D., Bodorik, P., & Dhaliwal, J. (2002). Supporting the e-business readiness of small and medium-sized enterprises: approaches and metrics. Internet Research, 12(2), 139-164.
[48] Kaiser, H. F. (1974). An index of factorial simplicity. Psychometrika, 39(1), 31-36.
[49] Kamel, S. (1995). IT Diffusion & Socio Economic Change In Egypt. Journal of Global Information Management (JGIM), 3(2), 4-17.
[50] Kamuzora, F. K., (2006), A Synthesis of Utilisationof Information and Communication Technologies in Tanzanian, Tourism System: A Multimethodology Approach, School of Informatics, University of Bradford.
[51] Kapurubandara, M., & Lawson, R. (2008). Availability of e-commerce support for SMEs in developing countries. ICTer, 1(1).
[52] Kari, H. K. (2007). Availability and accessibility of ICT in the rural communities of Nigeria. The electronic library, 25(3), 363-372.
[53] Katalambula, H. H. H. (2006). Country-wide Survey on the Status and Needs of Small and Medium Entreprises (SMEs) in Tanzania, and Measures to Address Them. University of Dar es Salaam, College of Engineering and Technology.
[54] Katz, J. E. (2003). Machines That Becomes Us: The Social Context of Personal Communication Technology. New Jersey: Transaction Publishers.
[55] Kaynak, E., Tatoglu, E., & Kula, V. (2005). An analysis of the factors affecting the adoption of electronic commerce by SMEs: Evidence from an emerging market. International Marketing

Review, 22(6), 623-640.
[56] Kendall, J. D., Tung, L. L., Chua, K. H., Ng, C. H. D., & Tan, S. M. (2001). Receptivity of Singapore's SMEs to electronic commerce adoption. The Journal of Strategic Information Systems, 10(3), 223-242.
[57] Kew, J. and Herrington, M. (2009) ICT & Entrepreneurship 2009. A research report presented to the Small Enterprise Development Agency, UCT Graduate School of Business, University of Cape Town [online] Availabe at: http://www.gsb.uct.ac.za/files/SEDAICTReport2009.pdf.[Accessed 10 June, 2011].
[58] Khemthong, S., & Roberts, L. M. (2006). Adoption of Internet and web technology for hotel marketing: a study of hotels in Thailand. Journal of business systems, governance and ethics, 1(2), 47-60.
[59] King, J. L., & Konsynski, B. R. (1995). Singapore TradeNet: a tale of one city. Harvard Business School.
[60] King, J. L., Gurbaxani, V., Kraemer, K. L., McFarlan, F. W., Raman, K. S., & Yap, C. S. (1994). Institutional factors in information technology innovation. Information systems research, 5(2), 139-169.
[61] Kirby, D. and Turner, M. (1993) IT and the Small Retail Business. International Journal of Retail and Distribution Management, 21(7), 20-27.
[62] Koh, S. C. L., & Maguire, S. (2004). Identifying the adoption of e-business and knowledge management within SMEs. Journal of Small Business and Enterprise Development, 11(3), 338-348.
[63] Kohli, R., & Devaraj, S. (2003). Measuring information technology payoff: A meta-analysis of structural variables in firm-level empirical research. Information systems research, 14(2), 127-145.
[64] Kuan, K. K., & Chau, P. Y. (2001). A perception-based model for EDI adoption in small businesses using a technology–organization–environment framework. Information & management, 38(8), 507-521.
[65] Kunda, D., & Brooks, L. (2000). Assessing important factors that support component-based development in developing countries. Information Technology for development, 9(3-4), 123-139.
[66] Lal, K. (2005). Determinants of the adoption of e-business technologies. Telematics and Informatics, 22(3), 181-199.
[67] Lange, R., McDade, S. R., & Oliva, T. A. (2004). The Estimation of a Cusp Model to Describe the Adoption of Word for Windows. Journal of Product Innovation Management, 21(1), 15-32.
[68] Lee, J. (2004). Discriminant analysis of technology adoption behavior: A case of Internet technologies in small businesses. The Journal of Computer Information Systems, 44(4), 57.
[69] Lee, J., & Runge, J. (2001). Adoption of information technology in small business: testing drivers of adoption for entrepreneurs. The Journal of Computer Information Systems, 42(1), 44.
[70] Lee, M. K., & Cheung, C. M. (2004). Internet retailing adoption by small-to-medium sized enterprises (SMEs): A multiple-case study. Information Systems Frontiers, 6(4), 385-397.
[71] Lee, M. K., & Cheung, C. M. (2004). Internet retailing adoption by small-to-medium sized enterprises (SMEs): A multiple-case study. Information Systems Frontiers, 6(4), 385-397.
[72] Lee, S., & Kim, K. J. (2007). Factors affecting the implementation success of Internet-based information systems. Computers in human behavior, 23(4), 1853-1880.
[73] Lee, W. W., & Chan, K. C. C. (2008). Computer Ethics: An Argument for Rethinking Business Ethics. In 2nd World Business Ethics Forum: Rethinking the Value of Business Ethics, Hong Kong Baptist University, 1-12, December 2008.
[74] Lefebvre, E., & Lefebvre, L. A. (1996). Information and telecommunication technologies: The impact of their adoption on small and medium-sized enterprises (No. 303.483 LEF. CIMMYT.).
[75] Lei-da, C., Haney, S., Pandzik, A., Spigarelli, J., C. (2003). Small business internet commerce: a case study. Information Resources Management Journal, 16(3), 17.
[76] Levy, M., & Powell, P. (2003). Exploring SME internet adoption: towards a contingent model. Electronic Markets, 13(2), 173-181.
[77] Levy, M., & Powell, P. (2004). Strategies for Growth in SMEs: The Role of Information and Information Sytems. Butterworth-Heinemann.
[78] Levy, M., Powell, P., & Worrall, L. (2005). Strategic intent and e-business in SMEs: enablers and inhibitors. Information Resources Management Journal (IRMJ), 18(4), 1-20.
[79] Levy, M., Powell, P., & Yetton, P. (2001). SMEs: aligning IS and the strategic context. Journal of Information technology, 16(3), 133-144.
[80] Levy, M., Powell, P., & Yetton, P. (2002). The dynamics of SME information systems. Small Business Economics, 19(4), 341-354.
[81] Loudon, Kenneth C. & Jane P. Laudon (2012). Management Information System: Managing The Digital Firm. 12th Edition. NJ: Prentice-Hall.
[82] Love, P. E., Irani, Z., & Edwards, D. J. (2004). Industry-centric benchmarking of information technology benefits, costs and risks for small-to-medium sized enterprises in construction. Automation in construction, 13(4), 507-524.
[83] Lu, J., Yu, C. S., & Liu, C. (2006). Gender and age differences in individual decisions about wireless mobile data services: a report from China. Proceedings of Helsinki Mobility Roundtable, 6.
[84] Ma, J. X., Buhalis, D., & Song, H. (2003). ICTs and Internet adoption in China's tourism industry.International Journal of Information Management, 23(6), 451-467.
[85] MacGregor R.C., Bunker D. J. and Waugh, P. (1998) Electronic Commerce and Small/Medium Enterprises (SMEs) in Australia: An Electronic Data Interchange (EDI) Pilot Study, Proceedings of the 11th International Bled Electronic Commerce Conference, Slovenia, June 1998.
[86] MacGregor, R. C. (2004). Factors associated with formal networking in regional small business: some findings from a study of Swedish SMEs.Journal of Small Business and Enterprise Development, 11(1), 60-74.
[87] MacGregor, R. C., & Vrazalic, L. (2005). A basic model of electronic commerce adoption barriers: A study of regional small businesses in Sweden and Australia. Journal of small business and enterprise development, 12(4), 510-527.
[88] Macpherson, A., Jones, O., Zhang, M., & Wilson, A. (2003). Re-conceptualising learning spaces: developing capabilities in a high-tech small firm.Journal of Workplace Learning, 15(6), 259-270.
[89] Malhotra, N. K., (2007). Marketing Research: An Applied Orientation. New Jersey, Pearson Prentice Hall.
[90] Malhotra, N. K., Hall, J., Shaw, M., & Oppenheim, P. (2004). Essentials of marketing research: an applied orientation. Pearson Education Australia.
[91] Manecke, N., & Schoensleben, P. (2004). Cost and benefit of Internet-based support of business processes. International

Journal of Production Economics, 87(3), 213-229.
[92] Manueli, K., Latu, S., & Koh, D. (2007). ICT Adoption Models. 20th Annual Conference of the National Advisory Committee on Computing Qualifications (NACCQ), (pp. 175-181). Nelson.
[93] March, J. G., & Sutton, R. I. (1997). Crossroads-organizational performance as a dependent variable. Organization science, 8(6), 698-706.
[94] Marshall, C., & Rossman, G. B. (2014). Designing qualitative research. Sage publications.
[95] Martin, L. M., & Matlay, H. (2001). "Blanket" approaches to promoting ICT in small firms: some lessons from the DTI ladder adoption model in the UK. Internet research, 11(5), 399-410.
[96] Mason, R. M. (1997, January). SME adoption of electronic commerce technologies: implications for the emerging national information infrastructure. InSystem Sciences, 1997, Proceedings of the Thirtieth Hawaii International Conference on (Vol. 3, pp. 495-504). IEEE.
[97] Matlay, H. (2000). Industry-higher education collaborations within small business clusters: Evidence from UK case studies. Industry and Higher Education, 14(6), 386-393.
[98] Matlay, H. and Addis, M. (2003). Adoption of ICT and e-commerce in small businesses: an HEI-based consultancy perspective. Journal of Small Business and Enterprise Development, 10(3), 321-335.
[99] Mbamba, U. O. L., (2006), Problems and Perspectives of Information Systems Management in Small and Medium Enterprises in Tanzania: Theoretical Foundations, PhD Thesis, School of Business and Economics, Umeå University.
[100] Mehrtens, J., Cragg, P. B., & Mills, A. M. (2001). A model of Internet adoption by SMEs.Information & management, 39(3), 165-176.